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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,058	05/20/2004	Makoto Nakayashiki	253318US2	6750
22850	7590	02/23/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HOLMES, JUSTIN K	
			ART UNIT	PAPER NUMBER
			3681	
DATE MAILED: 02/23/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/849,058	<b>Applicant(s)</b> NAKAYASHIKI ET AL.	
	<b>Examiner</b> Justin K. Holmes	<b>Art Unit</b> 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-11 and 15 is/are rejected.
- 7) ☒ Claim(s) 5-7, 12-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/20/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Examiner acknowledges receipt of the request for corrected filing receipt filed on August 17, 2004.

### ***Claim Objections***

2. Claims 1, 8 and 15 are objected to because of the following informalities: In the last line of each claim the term "predetermined of time" is incorrect. It is suggested that the word "of" be deleted. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 8-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,775,938 to Hiramatsu.

Regarding Claims 1, 8 and 15, the Hiramatsu patent teaches a control apparatus for an automatic transmission for a vehicle having a control portion 42 that executes a neutral control in which the control portion places the automatic transmission in a neutral state by reducing the application load on a frictional apply device 24 inside the automatic transmission when the vehicle is stopped. See column 5, lines 65-68. The neutral control as broadly recited in the claims is defined as general control of the frictional apply device to regulate the pressure on it. See column 5, lines 44-61. A neutral state as broadly recited in the claims is defined as the vehicle being at a

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standstill in the Hiramatsu patent. See column 5, lines 62-68. The frictional apply device as broadly recited in the claims is the low reverse brake 24. See column 5, lines 62-68.

The control portion 42 ends the neutral control when a torque transmitted to the frictional apply device 24 has been continually equal to, or greater than, a predetermined value for a consecutive predetermined time. The Hiramatsu patent calculates the predetermined value of rotational difference between the input shaft and the output shaft. See column 6, lines 43-54. When the actual difference between the rotational speed of the input shaft and output shaft are great than the calculated value the full engagement of the frictional apply device is applied thus ending the neutral state. See step 64 in Fig. 4 and column 7, paragraph 24. The predetermined time as broadly recited in the claims is defined as the program loop of steps 51, 52, 61-68 having to be repeated until the low brake 24 is completely engaged. See Fig. 4 and paragraph 25.

Regarding claims 2 and 9, the torque transmitting estimation portion is defined as the calculation of the desired rotational speed difference of the input shaft from the driving force and the input rotational speed of the automatic transmission experienced by the low brake 24, see column 6, lines 43-45. The torque is estimated since the torque capacity of the low brake 24 is varied based on the rotational speed difference. See column 5, lines 49-53.

Regarding claims 3 and 10, the torque determining portion are steps 57 and 64 that compare the estimated torque transmitted the frictional apply device and the actual

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torque applied to the torque transmitting device 24 and whether it was above the calculated value. See Fig. 4.

Regarding claims 4 and 11, the cumulative time calculating portion is defined as the feedback control of the torque capacity of the low brake 24. The cumulative time calculation as broadly recited in the claims is defined as the time it takes for the control system to execute the program loop of steps 51, 52, 61-68 of Fig. 4 and that the predetermined value is defined as the time that it would take to do one loop of the program since it would naturally take "a predetermined" amount of time to complete. See paragraph 25, Fig. 4 and Claim 9 in the Hiramatsu patent.

Accordingly, all the elements of claims 1-4, 8-11 and 15 are anticipated by the Hiramatsu patent.

#### ***Allowable Subject Matter***

5. Claims 5-7 and 12-14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 4,651,142 to Klatt; U.S. Patent No. 6,843,754 to Mori et al.; U.S. Patent No. 6,440,039 to Warren; U.S. Patent No. 6,148,975 to Shih; U.S. Patent No. 5,272,630 to Brown et al.; U.S. Patent No. 6,039,673 to Mikami et al.; and U.S. Patent No. 4,730,708 to Hamano et al. all disclose clutch control systems.

***Facsimile Transmission***

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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(Signature)

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin K. Holmes whose telephone number is (571) 272-5930. The examiner can normally be reached on 8:00am to 4:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JKH  
2/20/06

  
**CHARLES A. MARMOREK**  
SUPERVISORY PATENT EXAMINER  
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